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SECURITY INFORMATION

OAD No. 7059/A
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15 May 1953

MEMORANDUM FOR: Executive Secretary of the Board of National Estimates

FROM : Assistant Director for Research and Reports

SUBJECT : Comments of Admiral Radford on SE-37, "Probable Effects on the Soviet Bloc of Certain Courses of Action Directed at the Internal and External Commerce of Communist China," published 9 March 1953

REFERENCE : Your memorandum of 30 April 1953

1. In reference to your memorandum of 30 April 1953, enclosed are twenty copies of CIA Memorandum IM-336 entitled "A Discussion of Admiral Radford's Comments on SE-37, CIA TSC #70593.

2. In respect to Sections II to V dealing with the Trans-Siberian and Chinese Communist railway systems, those parts touching upon the Trans-Siberian system and connecting Chinese railway lines, incorporate data and information which have been accepted by all representatives of the IAC agencies in the EIC Transportation Subcommittee. The information and data concerning the Chinese Communist railway system were accepted as a basis for negotiation in connection with EIC-M-52, by all representatives of the IAC agencies in the EIC Transportation Subcommittee, except ONI. SE-37 which incorporated similar data and information concerning the Chinese Communist railway system was accepted by all members of the IAC at their meeting on 5 March 1953, except the Director of Naval Intelligence and the Deputy Director of Intelligence, The Joint Staff.

OTTO E. GUTHE
Assistant Director
Research and Reports

Enclosures (20)
IM-336

OCh/R
25X1A [redacted]/elo
15 May 53

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IP 336

14 May 1953

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A Discussion of Admiral Radford's Comments on SE-37: "Probable Effects on the Soviet Bloc of Certain Courses of Action Directed at the Internal and External Commerce of Communist China," Published 9 March 1953

In CINCPACFLT's comments pertaining to economic matters mentioned in Special Estimate 37, he references 32 specific points in the text of Special Estimate 37 with which he takes issue. Of these 32 comments, many relate to several issues. Eighteen have to do with the capacities of the Trans-Siberian and Communist China's railway systems; eight refer to the 1952 volume of traffic on Communist China's railway system; five relate to the availability of rolling stock for Communist China's railways; five concern the expansion of Communist China's industrial and transportation systems; eleven remark on the volume of seaborne and overland imports to Communist China; eight question the Soviet Bloc's capability to supply Communist China goods and shipping services which Communist China now obtains from non-Communist countries; and five mention the effectiveness of present trade and shipping controls applied by non-Communist countries against Communist China. To minimize repetition, and to set forth as succinctly as possible the economic facts and rational bases on which the Special Estimate 37 was formulated, the following pages present a discussion of CINCPACFLT's comments under the various topical headings to which they relate, and in the left-hand margin, references are made to the specific paragraphs of the Special Estimate 37 concerning which CINCPACFLT's comments pertain.

I. Trade and Shipping Controls.

CINCPACFLT agrees substantially with CIA that trade and shipping controls have been ineffective in denying to the Chinese Communists essential goods and shipping services up to the present time. Specifically, "Present Western controls on trade with Communist China are believed to have had little effect in the rate of expansion (of Communist China's industrial and internal transportation systems) or the cost of expansion to the Soviet Union." "However it should be noted here that a considerable portion of the seaborne imports from Communist countries especially Eastern Europe, actually originated in non-Communist countries." CINCPACFLT agrees

Page 1, Para 1.
Page 5, Para 16.

Page 6, Para 24. Page 7, Para 29. Page 8, Footnote 9. Page 9, Para 33.

that the Chinese Communists have overcome the difficulties imposed by Western controls in obtaining "medicinal drugs . . . rubber tires . . . raw rubber . . . communications equipment." Under conditions of a total embargo against Communist China "CINCPACFLT cannot conceive that the Soviet Bloc will be able to make up for the loss of Western shipping." "There were 170 foreign ships of 950,000 gross tons employed in the China Trade in January 1953. This tonnage represents 41 percent of the total 2,252,000 gross tons in the combined Soviet Bloc merchant fleets, (excluding Communist China)."* "CINCPACFLT believes that a total embargo would cut off all of 1,298,000 tons of imports from non-Communist countries plus part of the 330,000 tons from Communist countries carried in non-Communist ships in 1952."

In considering the "Probable Effects on the Soviet Bloc of Certain Courses of Action . . .," the Estimate implicitly accepts the fact that the effects of such action are not borne fully and solely by Communist China alone, but are spread through the Bloc, the other satellites reacting to assist Communist China in the procurement of essential supplies for its economic development. While CINCPACFLT agrees that Western controls have thus far not prevented Communist China from receiving a steady flow of materials from Western to Eastern Europe for transshipment to China, and that trade controls have had little effect in reducing the rate and cost of expansion of Communist China's industrial and internal transportation system, CINCPACFLT believes that a total embargo against Communist China would cut off practically all the imports from non-Communist countries plus part of the imports from Communist countries carried in non-Communist ships, and that the Soviet Bloc would then be unable to supply either the shipping or the products necessary to sustain the economy of Communist China.

It is pointed out that it would only be necessary under conditions of a total embargo against Communist China, for the Soviet Bloc to charter the equivalent of the Western ships engaged in the China trade and now under charter to Communist China, and for Communist China to develop further the existing Soviet Bloc procurement channels for Communist China's purchase of commodities now supplied directly by non-Communist countries, in order for Communist China to continue to obtain the same volume of commodities of Western origin as at present. In 1952 there were 241 non-Communist ships of 1,184,000 gross tonnage operating under charter to the Soviet Bloc (including Communist China) engaged in trade between Western and Eastern Europe, and including 205 ships in the China Trade. In the absence of a general embargo against the Soviet Bloc, it would still be possible for the Soviet Bloc to charter such Western ships and to transfer the equivalent gross tonnage of their own ships to the China carrying trade. As CINCPACFLT observes, "The reason for the failure of

* Correctly speaking, the percentage of foreign ships in the combined Soviet Bloc merchant fleets serving Communist China in 1952 should be expressed as 25.4 percent of 3,739,000 gross tons, i.e., 2,555,000 gross tons of their own ships plus 1,184,000 gross tons of non-Bloc ships under charter to the Bloc including Communist China.

the present system of controls is that each subscribing country controls its own list of commodities to be controlled, and in doing so is motivated by a desire to continue to sell its own goods at a profit rather than by an unrelenting desire to deny strategic materials to the Communists. Page 1, Para 1. Further some non-Communist countries have not committed themselves in any way to deny strategic goods to the Soviet Bloc." In other words, unless a general agreement can be reached among non-Communist countries to enforce a general embargo against the entire Soviet Bloc, a total embargo against Communist China would be frustrated as a means of denying strategic goods and services to Communist China as a part of the Soviet Bloc. In this connection it is relevant to note that the USSR's ship-building capacity -- which has since 1945 been devoted entirely to the construction of naval vessels -- has the capability of replacing the entire Soviet merchant shipping fleet within one year were it to convert to peace time ship construction. Thus, if it were possible actually to deny Western shipping to Communist China and the replacement of Soviet Bloc ships by Western ships in Soviet Bloc Western trade, the need of Communist China for shipping services would provide a good test of Soviet intentions as between naval construction for war purposes and Communist China's requirements for shipping services in trade with the Bloc.

II. The Capacity of the Trans-Siberian and Chinese Communist Railroad Systems

A. Capacity of the Trans-Siberian railroad

CINCPACFLT doubts that 3.4 million tons of goods were shipped into China from the Soviet Bloc by land in 1952, saying that this amount appears high in the light of known capacities. (This figure will be subsequently discussed in Section VI below.) CINCPACFLT also doubts that the press of Soviet military and other requirements in the Far East would permit release of sufficient space on the Trans-Siberian Railroad for the carriage even of the 648,000 tons of goods which China received in 1952 from the Soviet Bloc by sea. Page 5, Para 17. Page 11, Para 47.

Assuming for present purposes that the 3.4 million ton figure of land movements into China is correct, the addition of 648,000 tons of freight which formerly moved by ship from the Soviet Bloc plus 1,298,000 tons received (according to Navy figures) by ship from the non-Communist world in 1952, would give a total of about 5.4 million tons per year, or about 14,800 tons daily. In a publication* approved without dissent by all IAC agencies including ONI, it is stated that the Trans-Siberian Railway could spare 16,000 tons daily of its maximum eastbound capability for shipments to China and North Korea, assuming a peacetime emergency sufficiently great so that shipments to the Soviet Far East would be reduced to a minimum. On this basis, there is sufficient capability available for the Trans-Siberian railroad to haul the 14,800 tons daily required on the above basis, if ocean shipping to China and Manchuria were eliminated. In addition, some of this traffic might move by ship to Vladivostok, and then move westbound to Suifenho and via Kraskino into North Korea. Such westbound movements would not be deducted from the eastbound capability of the line. If the present annual rate

* EIC-R-9: "Capability of the Trans-Siberian Railroad and Connecting Lines in Manchuria and Korea," dated 12 December 1952.

of movement to China from the Soviet Bloc by land is less than 3.4 million tons, as suggested by CINCPACFLT, then even less of the Trans-Siberian railroad's eastbound capability would be utilized.

It is likely that the Navy statement concerning "known capacities" is based on early estimates of the capability of the Trans-Siberian railroad which gave a figure of 22,500 tons each way per day. This estimate, which had been accepted for some time by intelligence agencies in Washington in the absence of a better estimate, was based on insufficient or out-dated evidence, and was revised in the light of more complete data and further study of the problem. The revised was agreed by all U.S. intelligence agencies.

B. Capacity of Individual Railroads in Communist China

CINCPACFLT's comments pertaining to Communist China railroads are focussed on two points: 1) that the individual railroad lines have insufficient capability to handle additional traffic, and 2) that the freight car park is insufficient to handle additional traffic. (The latter will be discussed separately in Section IV of this paper.)

Support for CINCPACFLT's position regarding this question is contained in the Special Estimate 37 which states, "Estimates of capacity of the inland transportation systems serving Communist China are predicated to a large extent upon incomplete and insufficiently corroborated evidence. For this reason, these estimates should be regarded with reserve as being subject to a possible large margin of error." CIA agrees that estimates of capacity of rail lines are subject to an appreciable margin of error; however, this is a plus or minus margin, and in some cases it is considered more likely that the capacity of individual railroads is higher than that stated rather than lower. (An example of this is given in the study of the Lanchouli-Harbin line in EIC-R-9, "Capability of the Trans-Siberian Railway and Connecting Lines in Manchuria and Korea," 12 December 1952.)

Page 12, Footnote 12.

It is assumed that the CINCPACFLT's criticism is directed at the following statement in the Special Estimate 37: "Since the additional burden of essential tonnage placed on both the Trans-Siberian railroad and the internal transportation system of Communist China could probably be carried with existing capacity, we believe that the reliance on overland transportation facilities would not limit the extent to which Communist China's essential seaborne imports could be replaced." It should be stated first that CIA has no evidence that any one line in either Manchuria or China Proper is at present overburdened. Secondly, it should be stressed that the burden of the additional traffic thrown on railroads by a blockade would be concentrated on the trans-border lines (Tarskiy-Lanchouli-Harbin, Voroshilov-Suifenho-Harbin, and Baranovsky-Kraskino-Hongui), and on the sole connecting rail link between

Page 11, Para 37.

the rail networks of Manchuria and China Proper, the Chinchou (Chinhsien)-Shanhaikwan-Sientsin line. It seems certain from available evidence that the four main routes in Manchuria and their alternates have sufficient surplus capacity to carry any predictable increase in traffic to China Proper, central Manchuria or North Korea resulting from a blockade. The major problem is whether the Chinchou-Shanhaikwan-Tientsin line has sufficient surplus capacity to carry into China Proper the traffic now being received both by ocean and coastwise shipping, or whatever proportion of that shipping which would move in the event of a blockade. This is a double track line, running through relatively flat terrain, and on the basis of a published Chinese report on its capability, plus comparison with double track lines with similar characteristics in this country, it is believed that this line has sufficient surplus capability, above what is estimated as existing traffic, to carry the additional traffic which might be forced on it by a blockade of ocean and coastwise shipping.*

Page 2, Paras 3&4. Page 13, Paras 55 &56.

The only individual lines whose capability is questioned by CINCPACFLT are the lines serving Port Arthur, Dairen, and Hong Kong, which he indicates are "already overburdened." This is definitely not true of the Canton-Kowloon line, which now carries very little traffic, and we have no evidence that this is true of the high-capacity double-tracked line from Dairen to Mukden. If such evidence can be cited for the latter line it will be carefully considered.

Page 2, Para 3.

CINCPACFLT states that "The conclusion quoted . . . is based upon theoretical high estimates of the capacities of inland transportation systems on the one hand, . . ." It should be repeated that, in general, estimates of the capacity of individual lines are not high, and a study of the methods used would so indicate. A specific illustration of this is the capability figure for the Suifenho-Harbin line,** which is based on the assumption that the double track has not been restored on the Suifenho-Mutanchiang segment. If double track has been restored to this segment, as it could easily be since the line was double tracked until partially dismantled in 1945, then the capability of the line would be at least double its single track capability. Furthermore, estimates of the capability of individual lines have been based on known facilities. The introduction of diesel-electric locomotives on bottleneck sections, the elimination of the present limiting grade, installation of centralized

* The detailed study in CIA's contribution to EIC-R1-S1, "Communist China's Imports and Shipping Involved in Trade with Communist China, 1 January - 30 June 1952," gives an estimated distribution of shipping receipts between Manchuria and China Proper, as well as details on the capability of this line.
** EIC-R-9: "Capability of the Trans-Siberian Railroad and Connecting Lines in Manchuria and Korea," dated 12 December 1952.

traffic control (or some other improved type of signalling) on the bottleneck section would permit a significant increase in capability over that existing before the introduction of these improvements.

III. Capability of the Communist China Railroad System to Carry More Ton-Kilometers of Traffic Than Were Reported in 1952.

Page 11, Para 49. CINCPACFLT doubts the accuracy of the Chinese propaganda broadcast of 16 February claiming the railroads carried 36.9 billion ton-miles in 1952. This is based on the calculation that with 40,000 freight cars and an assumed 28 net tons per freight car, the average Chinese freight car would travel an average of 90.3 miles a day. This is said to be too high in view of Navy calculations that in 1950 each Soviet freight car traveled only 29.8 miles a day, while in the US the average is 40 miles per day.

CINCPACFLT calculation with reference to Soviet freight car travel is inaccurate, since in 1940 operable freight cars are reported to have made an average daily run of 139.9 kms, (86 miles).* In 1950 this figure was exceeded by 4.6 percent, which gives an average daily run per operable freight car in 1950 of 146.3 kms, or 90.5 miles.

There is little comparison between average daily movement of freight cars in the US and China. In the US, the shipper is given 48 hours free time to load a car, and the receiver is given 48 hours free time to unload; Saturdays, Sundays, and holidays are also given free. Therefore, in any one seven-day period it is possible that a car may not move at all, since it may arrive at destination on Wednesday, be placed for unloading that night, be unloaded Thursday and Friday, stand idle Saturday and Sunday, be loaded Monday and Tuesday be pulled out of loading track Tuesday night, and not get into a train until Wednesday. By contrast, railroads of China and Manchuria permit only four hours for loading and unloading.** Shippers in the US also have much greater latitude than those in China about accepting or rejecting cars unloaded as being suitable for reloading. Assuming that US and Chinese railroads have an equal elapsed time between the arrival of a train and the beginning of unloading, it is apparent that Chinese freight cars are moving a considerably higher percentage of the time than US freight cars.

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* Voprosy ekonomiki zhelez. transporta; sbornik statey, Moscow, 1948.
** CIA, FDD U-1430, "Railway timetables for China, 1 Dec 1950," 15 August 1951; this is confirmed by a former Manchurian railroad employee in CIA OO Source, 25 January 1952, Secret/US Officials Only.

CINCPACFLT's calculation is also inaccurate in that it uses 28 short tons load per car, which is apparently taken from Chinese Communist statements of average loading per freight car and which are, in fact, given in metric tons. If 28 metric tons, or about 31 short tons is used for the denominator, and the Chinese figure of 36.9 billion ton-miles and 40,000 freight cars are used, the average movement per freight car is 82 miles per day instead of 90.3 miles. If average loading increases above 28 metric tons, as the Chinese Communists now maintain, this further decreases average daily movement per car in the statistical computation cited by CINCPACFLT.

Since there is no firm evidence that Chinese freight cars move less than 90 miles a day, no compelling reason appears in CINCPACFLT's comments for rejecting Chinese Communist statements of ton-miles performance.

Page 10, Para 45.

CINCPACFLT states, "The transfer of these goods (commodities now carried by coastal shipping) to inland transport would mean an approximate 100 percent increase in the tonnage committed to rail transport." Traffic carried by coastal shipping is estimated at 9,100 tons per day, or about 3.3 million tons a year. If this represents CINCPACFLT's conception of the relative magnitudes of tonnage carried by coastal shipping and the railway lines, it would explain the basis of his disagreement with the conclusions of the Special Estimate 37. Far from causing a "100 percent increase in the tonnage committed to rail transport," it would impose an additional burden of only 2.5 percent, if dispersed over the railway system, since in 1952 the Chinese railroads carried an announced 131 million tons (which agrees closely with CIA's previous estimate of 130 million tons).

Page 11, Para 49, Footnote 12.

CINCPACFLT's added comments in respect to Footnote 12 on page 49 of the Special Estimate 37 are somewhat misleading for the following reasons: (a) The dissent of the Director of Naval Intelligence and the Deputy Director for Intelligence, the Joint Staff, in Footnote 12, which CINCPACFLT mentions in this connection, has little bearing on the statement in paragraph 49 that "The additional burden imposed by a blockade would add approximately 3.8 percent to the total volume of freight currently carried by the railroads of Communist China." Footnote 12 deals entirely with the subject of estimates of capacity; the 3.8 percent figure is a comparison of tonnage carried by ocean and coastwise shipping with the total tonnage carried by railroads in 1952, which does not necessarily represent capacity. (b) CINCPACFLT's comment on Footnote 12 suggests that the 3.8 percent was based on 1952 ton-kilometer performance of the Chinese railroads. In fact, the 3.8 percent figure is based on tons hauled, as follows: Ocean shipping, 4,200 tons daily or 1.5 million tons annually; coastwise shipping, 9,100 tons daily or 3.3 million tons; total shipping, 13,300 tons daily or 4.8 million tons annually. The Chinese Communists reported carrying 131 million tons by rail in 1952; the 4.8 million tons would represent a 3.7 increase over 1952 performance.

It should be pointed out here that while tons would increase 3.7 percent, the ton/kilometers represented by the 13,300 tons daily would equal about 16.5 million ton/kilometers daily or about 6.0 billion ton/kilometers annually, on the basis of estimates indicated below. This latter figure is 10 percent of the 59.5 billion ton/kilometers which the Chinese announced performing by rail in 1952. The added burden would not be that great, however, because some of these goods already move from port to destination over railroads. The 10 percent figure is based on the following computations: The 4,200 tons daily carried by ocean shipping would, if moved all-rail via the Manchurian border points, be carried an average distance of 2,400 kilometers on the railroads of China, giving a total of 10.1 million ton/kilometers; the estimated 9,100 tons daily moving coastwise are estimated to move an average of 700 kilometers, or a total of 6.4 million ton/kilometers daily. The ocean and coastwise shipping would, therefore, if entirely transferred to the railroads, require 16.5 million ton/kilometers daily or about 6.0 billion ton/kilometers annually. However, it should be stressed that, even if all the former water-borne traffic moved by rail, the net increase in ton/kilometers would not approach 6.0 billion ton/kilometers because a large part of this traffic, particularly sea-borne imports, already receives a rail haul, such as freight received by ocean ship at Shanghai, Taku Bar and Dairen, which moves into the interior by rail. Existing rail haul of these commodities would have to be deducted from the 6.0 billion ton/kilometers to obtain a percentage figure of the actual increase.

The present rail haul given to seaborne imports is estimated at an average of about 250 kilometers, based on an estimated average rail haul from major ports, weighted on the basis of relative receipts of seaborne imports. Utilizing the 2,400 kilometer average length of haul, which would be necessary if all seaborne imports are moved by rail, and deducting the 250 kilometers existing average rail haul for seaborne imports gives the result that the 4,200 tons daily of ocean shipping imports would receive 2,150 kilometers' more rail haul than they do at present, which would be equal to 9.0 million ton/kilometers daily, or 3.3 billion ton/kilometers annually. Adding to this the 6.4 million ton/kilometers daily or 2.3 billion ton/kilometers annually of former coastwise shipping would give a total of 5.6 billion ton/kilometers, which would be a 9.4 percent increase over the 1952 performance of 59.5 billion ton/kilometers.

No adjustment is made on the 700 km. average haul for freight formerly moving in coastwise vessels because this figure was derived by utilizing an estimated coastwise vessel haul and measuring the rail distance for a comparable haul. Since existing rail hauls were already excluded in the estimated coastwise vessel haul, they need not be excluded in calculating the actual increase in average rail haul which would result if the coastwise traffic were thrown on the railroads for its entire movement.

In conclusion, granted that there would be initial dislocations and difficulties, as well as elimination of some non-essential traffic, CIA's railway traffic consultants see no insuperable obstacle in the accommodation of Communist China's railway system to the additional burden which might be imposed by the forced withdrawal of coastal shipping and seaborne imports.

IV. The Chinese Communist Freight Car Inventory

Page 1, Para 2 Page 6, Para 21.

CINCPACFLT doubts whether the Chinese railroads today have the 40,000 freight cars as mentioned in the Special Estimate 37. The background for this estimate is as follows: In 1945 the Manchurian railroads had 41,984 freight cars, and the railroads of China Proper had 25,881 freight cars, or a total of about 67,800 freight cars for the entire area.* In 1949, however, the Minister of Railways stated that the total operable park of freight cars in China was 39,900 cars. This figure of roughly 40,000 cars has been accepted by most US intelligence agencies, although it is possible that the freight car park may now actually be somewhat closer to the 67,800 total which was on hand in 1945.

CINCPACFLT's comment is that if the 40,000 freight car park is accepted, then it should be reduced to the extent that freight cars have been destroyed by air action in North Korea, since, it is stated, the US Navy and Air Force claim that during 1950 and 1951 over 10,000 rail cars were destroyed in North Korea. CIA has no means of checking this claim. However, it is reasonable to assume that the 10,000 figure includes both destroyed and damaged freight cars, and that at least part of this figure includes multiple counting of the same car, either because it was counted each time an area was raided or because a damaged car may have been repaired and damaged repeatedly. It is normal railroad practice, in making periodic heavy repairs on freight cars, to strip them to the underframe, and often to the trucks. Even if the body of a freight car is destroyed, the trucks often are still intact or relatively easily repairable. The trucks are the critical portion of a freight car. To restore the car to operation would in this case involve the same techniques employed in restoring a car when heavy repairs are being made. Repair of many of the "destroyed" or damaged cars would therefore not be an unduly difficult job.

The Navy comment also ignores the fact that the North Korean railroads also had freight cars, and that because freight car requirements have undoubtedly been considerably reduced as a result of the war, the North Korean railroads could lose at least part of their freight cars without experiencing a true car shortage. No confirmed figure of NK rolling stock park is available to us. Two separate sources give figures of between 14,000 and 15,000 freight cars in 1946 and 1950, plus about 1,000 passenger cars.**

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* CIA, ORR IP-279

** Army, FEC, ATIS, Enemy Documents Korea No. 42, 11 June 1951 gives the 1946 figure; SO 42583, 12 July 1950 gives the 1950 figure.

Two other sources give figures of 8,000 to 9,000 freight cars and about 600 passenger cars for 1948 and 1949.* Thus, the figures on total available car park (freight plus passenger) ranges from a low of 8,600 to a high of almost 16,000. In this case freight and passenger cars are combined because it is assumed that reports on cars damaged and destroyed probably do not differentiate between the two types.

It is accepted, as CINCPACFLT comments, that the Chinese Communists admit to producing only 1,419 new freight cars in 1950 and 1951. There are, however, some indications either that this figure was too low, or that present production is considerably above this level. For example, a Mukden newspaper said that in August 1949 monthly production of the Huangkutun (Mukden) railroad car plant was 200 cars, using an assembly-line system.** If this monthly production rate were maintained over a year, this plant alone would be able to produce 2,400 cars. This information may be confirmed by the report of a Russian repatriate that this plant's output of passenger and freight cars totaled seven per day (about 2,100 per year, assuming a six-day week).*** In addition, a book published in Peiping stated that the Dairen Rolling Stock Manufacturing Plant manufactured 250 freight cars in the first half of 1949.**** Assuming 500 freight cars produced in this plant in 1949, these two plants alone would have combined productive capacity of about 2,900 cars a year.

Although there is no firm evidence to permit an estimate of total imports of freight cars into China since 1950 there is reason to believe that the number may be appreciable. There is ample confirmation that China received tank cars from the USSR, estimated by one repatriate from Manchuria at about 500 units. Some of these have been sighted as far south as Kowloon. Some other types of freight cars have been received from the European Satellites.

While Chinese rolling stock operates on the North Korean railroads, there is no strong indication that any freight cars have been transferred to these railroads. It is believed that the Chinese

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* SO 42656, 11 July 1950, and Army, FEC, ATIS, Enemy Interrogation (Documents?) Korea No. 36, 11 May 1951.

** Mukden Tungpei Jihpao, 14 August 1949, from OO-U 44/50, 4 January 1950

25X1C *** [redacted] 9 October 1951, Secret/US Officials Only.

**** China Project # 607, Ku Ting, "Hsinhua Shihsnih Tsungkan She," Peiping, March 1950. 25X1C

freight cars in North Korea are those which come loaded from Manchuria and China Proper since this freight is not transloaded at the border from Chinese to North Korean cars. It is believed further that there is very little internal traffic within North Korea. Thus, the North Korean railroads are believed to be operated as an extension of the Manchurian rail network, without transloading of cars at the border, which permits more efficient use of the combined rolling stock parks than would be the case if the systems were operated separately.

An Army report indicates a total of about 70 trains moving nightly in North Korea.* Assuming an average of 10 cars per train would give about 700 cars moving in trains. Assuming two cars not moving nightly for each car moving in trains would give total car requirements of about 2,100 operable freight cars to support the movement of 70 trains. This estimate provides some indication of the relatively small number of freight cars involved in the support of railroad transportation in North Korea.

Page 11, Para 49.

CINCPACFLT indicates that the statement in the Special Estimate 37, "....the transportation overland of the freight (which formerly moved by ocean and coastwise shipping) would require about 10 per cent of the freight car park...." is based on "completely unreliable information." This 10 per cent figure was derived from a detailed estimate of freight car needs contained in CIA's full contribution to the Special Estimate 37.** This estimate is based on the following calculations:

* Army, FEC, Intelligence Summary 3576, 24 June 1952.
** CIA/RR IP-331.

	Requirements to Move by Rail the Freight which Formerly Moved by		
	Foreign Shipping	Coastwise (non-POL)	Coastwise (POL)
Tonnage to be moved daily	4,200	8,700	1,300
Tons loaded per car	30	35*	30
Cars loaded daily	140	250	44
Average length of haul to destination (one way) (kms)	2,400	700	700
Estimated average speed of car (km./hr)**	15	15	15
Estimated turnaround time of cars (days)//	15	6	6
Estimated operable car requirement to supply this movement	2,100	1,500	264
Assumed 5 per cent additional in bad order	105	75	13
Total Car requirement to supply this movement	2,205	1,575	267

* Since much of this consists of coal, the higher loading figure is used.

** For normal freight movements, an over-all speed between origin and destination of 10 km/hr would be used; but since this would undoubtedly be moved in solid train-loads in through movement, with little or no intermediate classification, the 15 km/hr figure is believed to be justified.

// Includes actual travel time (based on 15 km/hr) plus two days for loading, unloading and terminal time.

The total car requirement shown above is 4,047 cars, which would be approximately 10 per cent of the estimated freight car park of 40,000 cars.

V. Expansion of Communist China's Railroad and Industrial Systems.

a) Page 1, Para 1.
b) Page 5, Para 20.
c) Page 10, Para 39.
d) Page 6, Para 21.

CINCPACFLT's remarks on the Special Estimate 37 in respect to the expansion of Communist China's industrial output refer particularly to a) the lack of substantial expansion except in Manchuria, b) the small estimated production of military and items, c) the inability of the Chinese Communists to master the technology necessary for the production of synthetic fibers, and d) the lack of significant production of rolling stock.

In respect to the expansion of the Chinese Communist railroad system, CINCPACFLT indicates that over 80 percent of the construction has been on previously existing roadbeds. CIA agrees with this comment; CIA also has available reports from [redacted] on the difficulties of travel on newly completed lines, although such reports are at variance with photographs of portions of these lines which show evidence of excellent construction. 25X1C

Page 1, Para 1.
Page 6, Para 21.

With regard to CINCPACFLT's comments on the Special Estimate 37 statements that "Communist China's industrial and internal transportation systems have continued to expand since 1950," and that "The railroad transportation system of Communist China . . . has steadily improved in capacity and performance," it should be pointed out that expansion of the railroad network has relatively little significance in the Special Estimate 37, since the major problem is whether the existing lines running from the USSR-Manchurian border to North Korea and China Proper have the capability to handle existing traffic plus that which would be thrown on them by a blockade. While the newly completed lines have for the most part been strategic in nature, they are found on the periphery of the railroad net of China Proper, and do, therefore, not enter prominently into this consideration of moving traffic affected by the blockade.

There appears to be little question that the railroad system of Communist China has improved in capacity and performance. Such improvement should not be considered solely in terms of the rolling-stock park. The improvements in capacity have been on the many individual lines which have been restored to prewar condition, on the lines which had their second track restored, and on the Peiping-Mukden line where double-tracking was completed. Improvements in the capacity of locomotives have been achieved by increasing the daily average run, and assigning each locomotive to a specific crew which is responsible for its operation and ensures that proper maintenance is observed on it. Improvements in the capacity of freight cars have been achieved by increasing net load per car (in many cases, loading beyond the marked capacity of the car), increasing the daily average run of the freight car, and reducing loading and unloading time. Thus, improvements in the capacity of locomotives and freight cars have been achieved in large part by improvements in performance.

At no point in the Special Estimate 37 was it stated or implied that the character of the Chinese economy had radically changed, since the Communist take-over, from a basically low level agricultural subsistence economy to an industrialized self-sufficient economy. It was, in fact, pointed out that Communist China could pay for its imports or industrial equipment only by the export of agricultural products and raw materials, principally non-ferrous metals. Thus, the prosperity and rate of industrialization would depend largely upon the productivity of the agricultural and mineral extractive industries and the rate at which Communist China could absorb advanced industrial technology. Mass labour projects such as dikes for irrigation and flood control, increased mineral extraction, roads and railway roadbeds, factory and housing construction, increased cotton and textile production, and the more complete use of industrial facilities inherited from the Nationalists in China Proper and from the Japanese in Manchuria would be well within their immediate capabilities. However, since China is mainly dependent upon agriculture for its subsistence, a serious famine would place Communist China at the mercy of its Soviet Bloc partners and force it, at least temporarily, to abandon its immediate objectives of economic and military expansion. Conversely, a gradual increase of agricultural and mineral productivity, would enable Communist China to acquire the industrial equipment which the Soviet Bloc can supply for China's long-term economic development.

It is pertinent to note that the Chungking steel rolling mills produced 48,000 tons of steel rails which were more than adequate for the construction of the Chungking-Chengtu railway, that steel production increased probably 500,000 tons from 1951 to 1952 reaching a total of nearly 1,400,000 tons in the latter year, that electric power production increased from 5.2 to 6.3 billion KWHs from 1951 to 1952. These accomplishments which were possible only with inherited Nationalist and Japanese equipment (plus minor additions of capacity) still represent a very low level of economic development. The rate of increase of production as an indication of increasing technological capability is perhaps a more important factor since it has already enabled the Chinese Communists to exceed the peak production of iron, steel, electric power, and some non-ferrous metals over the records of the Nationalists and Japanese. In cotton and cotton textile production, the Chinese Communists have also exceeded the records of the past. Only in the year of 1936 was Nationalist China a net exporter of cotton. Now the Chinese Communists have contracted to export raw cotton to Hungary and cotton textiles to other members of the Soviet Bloc, although probably it will still be necessary to import long staple cotton as usual for mixing with the Chinese short staple fiber. With its resources of wool, ramie, linen, and silk, Communist China for the time being does not need to develop synthetic fiber production as these natural fibers are available either for indigenous use or for export; although the comparatively simple processes of rayon production are open to them for exploitation if required.

Page 10, Para 29.

Page 5, Para 20.

That hardly any of the arms and ammunition used in Korea are manufactured in Communist China is a phenomenon which lacks economic explanation in view of the known arsenal facilities which were taken over by the Communists in China. [redacted] indicates 25X1C that arsenal equipment is being imported from the USSR as part of the industrialization program. It might be assumed from this that the munitions industries were in process of conversion to production of Soviet type equipment. On the other hand, it might be deduced that the production of Chinese munitions industries is reserved for use by Chinese Communists troops in China Proper while more modern Soviet arms and ammunition are imported for use in Korea because of their greater efficiency, or because the Soviets prefer to export finished military goods rather than the raw materials for their manufacture. Also, since the removal of large amounts of Nationalist arsenal equipment prior to Nationalist evacuation from the mainland would prevent the Chinese munitions industries from supplying all the supplies required in Korea, it would be more feasible for the sake of standardization to import the total requirements of various categories of arms and ammunition rather than to face the supply and distribution problems which might be imposed by the use of heterogenious types of equipment. At any rate, the problem remains as a very difficult one to be solved by the Chinese Communist regime before it can establish a modern army. It represents one of the factors of its dependence on the USSR in respect to which it must remain for some time subservient to Soviet direction.

VI. The Volume of Overland and Seaborne Imports into Communist China.

Page 5, Para 17.

CINCPACFLT observes, in respect to the statement that total volume of overland imports during 1952 is estimated at 3.4 million tons, that he "can find no basis in available intelligence material for the estimate . . . The quantity stated (which amounts to 9,300 tons per day) appears high in the light of known capacities."

This estimate is based on the best evidence available to CIA, primarily PW interrogations by the Army, Far East Command. A PW who left Lanchouli in January 1951 said there were five freight trains each way per day; one who left in February 1951 and gave considerably more detail on this subject stated that there were eight to ten eastbound freight trains (but only five to six westbound, which checks with the statement of the first PW; a third, who worked in a railroad station between Angangchi and Lanchouli until January 1952 stated that the daily eastbound traffic consisted of an average of six or seven freight trains. Giving slightly greater weight to the second PW who appeared to be a more accurate observer, it is believed that seven or eight freight trains are moving eastbound daily on this line. These trains carry at least 650 tons of freight each, since the average number of cars per train is at least 30, on the basis of several PW reports. While Manchurian

cars have an average weighted capacity of about 36 tons, it is estimated that they are loaded to only 60 percent of capacity, because the traffic being carried is generally relatively light loading military goods, giving a net car load of about 22 tons, and a net train load (using 30 cars per train) of about 650 tons. Thus, the seven or eight freight trains would carry between 4500 and 5200 metric tons per day eastbound on the Manchouli-Harbin line. It is estimated that this traffic approximately equals that moving through Manchouli and Suifenho of between 9,000 and 10,400 tons daily. These estimates are confirmed in part by calculations of the requirements of the Chinese Communist armed forces and industry.

(a)Page 4, Para 12.
(b)Page 5, Para 16. Page 10, Para 44.
(c)Page 7, Para 30a.
(d)Page 1, Para 2. Page 9, Para 33.
(e)Page 9, Para 36.
(f)Page 9, Paras 39-43.
(g)Page 11, Para 46.

CINCPACFLT's comments in respect to seaborne imports indicate (a) that the non-Communist ships arriving in Chinese Communist ports are more than adequate to deliver the 1,298,000 tons which, CINCPACFLT's evidence shows, arrived in Chinese Communist ports from non-Communist countries in 1952; (b) that only 648,000 tons of Soviet Bloc shipments to Communist China arrived by sea in 1952, a considerable portion of which originated in non-Communist countries and a large volume of which moved through the free ports of Hamburg, Antwerp and Rotterdam; (c) that the volume of imports from non-Communists in 1953 will amount to well over one million tons; (d) that a total embargo would cut off practically all of the 1,298,000 tons of imports from non-Communist countries plus part of the 330,000 tons from Communist countries carried in non-Communist ships in 1952; (e) that a total embargo would have a significant effect on the capabilities of the Chinese Communists to sustain military operations in Korea; (f) that the long-run effects of a total embargo would be similar to the short-run effects on which he has commented; and (g) that a naval blockade would have great damaging effects upon the economy of Communist China, perhaps to the extent of cutting off seaborne imports totaling 1,946,000 tons including imports from both non-Communist and Soviet Bloc countries.

It has been indicated in Section I above that in the absence of a general embargo against the Soviet Bloc or a blockade of Communist China that the reasoning followed in the Special Estimate 37 correctly led to the conclusion that Communist China would still be able to obtain essential goods and shipping through Soviet Bloc channels of procurement. The concern at this point of the discussion is in respect to the volume of cargo received by Communist China via non-Communist ships from non-Communist countries. It is felt that the actual volume of such cargoes received by Communist China in 1952 is not substantially relevant to the conclusions which were reached in the Special Estimate 37. This question could well be left to the intelligence agencies to resolve by the comparison of actual evidence in their possession. The fact that Communist China received sufficient goods and services to provide the economic support for its military operations and for a small measure of progress in its industrialization program in spite of the existing controls is the real issue to be taken into account in its bearing upon

the conclusions reached in the Special Estimate 37. However, the order of magnitude of the total volume of imports received by Communist China is important in other respects quite apart from the conclusions which were reached in this Special Estimate 37. The comparison of recorded trade from non-Communist countries with the evidence from which CINCPACFLT derived his estimate that 1,298,000 tons reached Communist China from non-Communist countries via non-Communist ships would have an important bearing upon the assessment of Communist China's capacity to pay for its imports and to produce the exports as means of payment. There is no evidence of any credit being extended to Communist China by non-Communist countries nor of any increase of credit to Communist China from the Soviet Bloc. If the latter were true, the fact would probably be announced with attendant fanfare and evidence would be forthcoming of an increased volume of trade with the Bloc.

In this connection, it is relevant to note the difficulties and discrepancies which may arise in estimating the volume and value of imports to Communist China on the basis of the recorded trade figures of the various non-Communist countries. Since Communist China does not publish foreign trade statistics, estimates of its foreign trade must be based on an analysis of the trade returns of non-Communist countries' trade with China. This method of calculation is subject to a number of limitations. The major limitation for purposes of this report is the difference in commodity and country classifications employed by the various "recording countries" thereby making it impossible to determine accurately total trade or its commodity composition.

Two reporting factors produce an overstatement of Chinese foreign trade. The first is connected directly with the unique position of Hong Kong in Far Eastern trade. As an entrepot built on providing excellent trading and financing facilities, Hong Kong has served as a funnel for a large part of China's trade, as well as the trade of other Far Eastern countries. Consequently, in flowing through Hong Kong, a large proportion of the trade of the area is recorded in Hong Kong trade statistics, although the goods are almost immediately re-exported. Because of the transit nature of Hong Kong's trade, traders in the recording countries tend to list China as the source or destination on their export and import declarations, although Hong Kong receives and also records this traffic. In 1950 to 1953 particularly, many Western traders would deliberately indicate Hong Kong as the documentary destination on the bill of lading but then reroute the ships to China as soon as they were at sea.

The second factor, also a result of the recording system, is a variation of the double-counting factor. Since in many countries trade with Hong Kong and Taiwan and perhaps Macao and Korea is reported as trade with China, shipments that are destined for or originate in countries other than China are reported as trade with China.

If countries report Hong Kong trade separately, another difficulty arises. The China trade of these recording countries is thus understated to the extent of trade that goes through Hong Kong to China.

It has been possible to adjust recorded trade reported on a country basis so as to eliminate a large part of the double-counting. Generally, this adjustment is impossible when the country-commodity pattern of trade is not available, although it is possible to make these adjustments for a few major commodities.

Among the advantages of the reporting by the separate countries of origin is one of particular moment to this discussion, namely, that currency values of exports are always fully reported even when their grouping in commodity classifications makes difficult the sorting out of volumes of particular commodities.

As a result of the foregoing factors, the final estimates of values and volume might be somewhat overstated or understated within a limited range, but the range could not be as large as any significant percentage of the total exports to any particular country. The data would be useful in showing trends, orders of magnitude, and the relative importance of commodity groups. The data would be subject to some adjustment as between trade recorded by Western countries as East-West trade, on the one hand, and trade between Communist China and the European Satellites which served as the channel of procurement on behalf of Communist China, on the other.

For the foregoing reasons, no one working with recorded trade data alone should feel called upon to evaluate CINCPACFLT's statement that 1,298,000 tons of cargo arrived in Chinese Communist ports via non-Communist ships from non-Communist countries. However, 25X1C CIA is presently coordinating [redacted] intelligence discussion for the purpose of reaching a realistic estimate of the actual volume and value of Communist China's imports from non-Communist countries. Both CINCPACFLT and ONI are represented in these discussions. This comparison of evidence will facilitate an appraisal of Communist China's ability to pay for its imports and the end use of such imports for war or industrial purposes and of the extent to which Communist China is becoming a debtor to the Soviet Bloc. It would also enable a more realistic approach to an analysis of the availability of strategic materials to Communist China and of the effect which a denial thereof would have on the Chinese Communists' capability to sustain military operations.

From the standpoint of recorded trade data, there are a number of reasons for a figure lower than CINCPACFLT's estimate of 1,298,000 tons of Chinese Communist imports from non-Communist countries via non-Communist ships: (a) If there is a difference of as much as 500,000 tons between recorded trade figures and estimated cargo arrivals there is a serious fault in the statistical procedures of reporting non-Communist countries which results in an unreasonably high figure for unrecorded trade and smuggling. (b) The estimated value of Communist China's exports does not appear to have provided Communist China the means of payment for so large a volume of imports. (c) The higher figure is not supported by the average per ton value of Communist China's known imports.

The unit value of recorded imports is already very low; the value figures of reporting countries are reasonably complete and a proved increase in volume of imports would depreciate the already low unit value of imports. (d) The higher figure would mean that Communist China is a debtor to the Soviet Bloc to a much greater extent than has been revealed in any information thus far received concerning the economic relationship of Communist China to the Bloc. (e) It does not seem reasonable that the intelligence agencies and the US Consular reporting offices in the exporting countries and ports of transit could have missed so large a volume of exports to Communist China. (f) Even allowing for shipments through the free ports of Hamburg, Antwerp, and Rotterdam, the delivery of as much as 500,000 tons of cargo from non-Communist countries in excess of recorded trade suggests an unreasonably large possible scale of connivance on the part of non-Communist governments in avoidance of existing trade controls. (g) The much larger volume of Chinese Communist exports would tend to explain the arrival of more ships at Chinese Communist ports in ballast or without cargo than CINCPACFLT's estimate of cargo arrivals would suggest. (h) The higher rates on ships' charter space for exports from non-Communist China than for import cargo space would justify the arrival at Chinese Communist ports of ships which might be presumed to be carrying cargo but were actually in ballast. For the foregoing reasons, the present comparison of trade data with CINCPACFLT's shipping data will be mutually beneficial to the intelligence agencies in solving present and future problems in connection with estimates of Communist China's economic capabilities.

Thus, if CINCPACFLT's estimate of Communist China's imports from non-Communist countries via non-Communist ships is accepted, in order to balance its trade, Communist China's exports must be larger than previously estimated, thus, Communist China's productivity and economic capabilities must be higher than previously estimated. The volume of imports to Communist China from the Soviet Bloc likewise also may be larger, and Communist China may be more of an asset to the Bloc than was previously believed possible.

25X1A [redacted]/elc
14 May 1953
St/PR/RR

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VII. The Soviet Bloc's Capability to Supply Communist China the Commodities and Shipping Services Now Supplied by Non-Communist Countries.

25X1C

In Section VI mention was made of the [redacted] intelligence discussions which are currently being held for the purpose of reaching a realistic estimate of the volume and value of Communist China's imports. Although these discussions have not yet reached agreements on Communist China's imports from all non-Communist sources and from Soviet Bloc countries, it is now possible to state that the probable maximum of 1952 imports to Communist China from non-Communist countries including Hong Kong and Macao will not exceed 640,000 long tons 1/ and the total of Communist China's seaborne imports from Soviet Bloc countries will not exceed 550,000 long tons. In comparison with CINCPACFLT's estimates of 1,298,000 tons from non-Communist countries and 648,000 tons from Soviet Bloc countries (1,946,000 tons) it is evident that the import figures resulting from the [redacted] 25X1C intelligence discussions (in which representatives of CINCPACFLT and ONI are participating) will somewhat reduce the impact of an embargo or a blockade on the USSR's and Communist China's inland transportation systems which might result from a denial of seaborne shipping services, as discussed in Sections II to VI above.

The problem of the Soviet Bloc's capability to supply Communist China the commodities and shipping services now supplied by non-Communist countries is also correspondingly reduced in scope by the new estimates.

(a) Page 1, Para 2.
(b) Page 6, Para 24.
(c) Page 6, Para 29.
(d) Page 8, Para 31.
(e) Page 8, Footnote 2.
(f) Page 9, Para 36.
(g) Page 9, Paras 39-43.

CINCPACFLT points out, (a) that the Soviet Bloc now imports most of the commodities that Communist China imports from the West, (b) that the Chinese Communists obtain pharmaceuticals, rubber tires, raw rubber and communications equipment via transshipment from Western sources, (c) that ships and products needed by Communists are too scarce within the Soviet Bloc to allow any diversion thereof to Communist China without significant strain on the Soviet Bloc economy, (d) that the provision by the Soviet Bloc to Communist China of commodities now obtained from the West would magnify the difficulties now experienced by the Bloc countries in respect to their own shortages and distribution problems, (e) that the Soviet Bloc would be unable to supply Communist China the shipping services now obtained from the West, except by the utilization of Western shipping in intra-Bloc trade, which, however, would be disallowed by Soviet security practices, (f) that the denial of goods and shipping services under a total embargo would handicap the Chinese Communists in sustaining its military operations in Korea or elsewhere, and (g) that the long-run effects of the denial of goods and services to Communist China would be practically the same as the short-run effects on which CINCPACFLT has commented.

1/ This figure does not include 150,000 long tons (maximum) shipped from Hong Kong to Communist China via ships under 1,000 gross tons. However, the total figure for all shipments from non-Communist countries to Communist China, after final checking of evidence, will probably not be greater than 800,000 tons.

The total Soviet Bloc merchant shipping fleet consists of 775 ships (of over 1,000 gross tons) totaling about 2,555,000 gross tons. These totals include 83 US-owned Lend Lease vessels totaling 518,000 gross tons which the Soviet Bloc refuses to return to their legal owners. In addition to the 775 merchant vessels of the Soviet Bloc fleet, 241 vessels totaling 1,200,000 gross tons were chartered in 1952 to the Soviet Bloc by non-Communist countries, including 175 vessels totaling 950,000 gross tons under charter to Communist China. In addition to the Soviet Bloc fleet and chartered ships, 38 non-Bloc ships totaling 290,000 gross tons served the Bloc in 1952 by regularly scheduled voyages.

Since not more than 640,000 tons of seaborne cargo 2/ reached Communist China in 1952 from non-Communist countries, not more than 395,000 tons of seaborne cargo arrived in Communist China from Communist ports in Eastern Europe, and not more than 155,000 tons from Soviet Far Eastern ports (total, 1,190,000 tons from all sources), it is apparent from a comparison of the gross tonnage of vessels available to the Soviet Bloc with the total tonnage of water-borne cargoes imported to China, that the cargo tonnage could easily be carried to China by one-seventh of the Soviet Bloc fleet or by the tonnage under charter to the Soviet Bloc, in either case allowing for an involvement of 250,000 gross tons of shipping for three voyages per year. Thus, a combination of Soviet Bloc ships and ships under charter to the Bloc could transport the same volume of tonnage to Communist China in 1953 without difficulty.

It is also apparent from these statistics that an embargo against shipping services to Communist China would not be effective in preventing the same volume of cargo tonnage from reaching Communist China unless it were also applied against the Soviet Bloc as a whole, since ships now under charter to Communist China would be available to the Bloc by transferring their charter from Communist China to other Bloc countries. Thus, it would still be possible for the Soviet Bloc to follow its present practice of using its own ships for intra-Bloc trade and to a small extent for the shipment of more strategic cargoes to Communist China, while at the same time utilizing chartered Western ships for the shipment of the same volume of cargoes from non-Communist countries to Communist China as in 1952.

25X1C

Following are three tables which were developed for the purposes of the [redacted] intelligence discussion and which are introduced here to show the relative magnitude of the problem of the Soviet Bloc's capability to supply Communist China such commodities as Communist China received from non-Communist countries in 1952. Table I presents Communist China's seaborne imports from non-Communist countries in 1952 (excluding Hong Kong, Macao and shipments via Soviet Bloc ports). Table II presents Hong Kong's exports by value to Communist China in 1952. Table III shows the possible maximum cargo tonnage from non-Bloc ports to Communist China in 1952.

2/ This figure does not include 150,000 long tons (maximum) shipped from Hong Kong to Communist China via ships under 1,000 gross tons. However, the total figure for all shipments from non-Communist countries to Communist China, after final checking of evidence, will probably not be greater than 800,000 tons.

Table I

COMMUNIST CHINA'S SEABORNE IMPORTS FROM NON-COMMUNIST COUNTRIES--1952 3/
(Excluding Hong Kong, Macao and shipments via Soviet Bloc ports)
(metric tons)

Item	Jan-Jun	Jul-Dec	Total 1952
Raw Cotton	39,610	31,321	70,931
Crude Rubber	7,600	16,048	23,648
Petroleum Products	Nil	Nil	Nil
Transportation Equipment	Nil	Nil	Nil
Machinery & Metal Manufacturers	252	1,094	1,346
Iron & Steel	Nil	95	95
Non-ferrous Metals	Nil	167	167
Fertilizer	794	65,716	66,510
Industrial Chemicals	1,693	37,064	38,757
Pharmaceuticals	Nil	301	301
Foodstuffs	17,000	14,030	31,030
Gunny Bags	11,500	400	11,900
Pulp & Paper	3,000	26,926	29,926
Miscellaneous	2,763	9,979	12,742
Unknown	(see note)	8,500	8,500
Total	84,212	211,641	295,853

NOTE: No allowance has been made for ships of which it is not known whether they carried cargo or not.

3/ Table I is an approximate indication of the commodity composition of imports. It is subject to some revision in respect to details. See Table III for total volume.

Table II

SUMMARY OF HONG KONG'S EXPORTS (BY VALUE) TO COMMUNIST CHINA IN 1952 4/
(in thousands of US $)

Item	Jan-Jun	Jul-Dec	Total
Food, feed, beverages, & tabacco	141	672	813
Animal & vegetable crude materials, inedible, n.e.s.	383	1,789	2,172
Chemicals (including explosives) n.e.s.	11,684	8,204	19,888
Medicinal & pharmaceutical products	2,699	21,448	24,147
Dyeing, tanning, & colouring materials	1,081	8,562	9,643
Fertilizers, manufactured	438	39	477
Crude fertilizers and crude minerals, excluding coal, petroleum, & precious stones	6	4	10
Rubber & its manufactures, n.e.s.	neg	31	31
Pulp, paper, & their manufactures	3,479	556	4,035
Textile fibers	970	3,558	4,528
Textile yarn, fabrics, make-up articles, & related products (including clothing)	1,204	662	1,866
Footwear			
Mineral fuels, lubricants, & related materials			
Non-metallic mineral manufactures, n.e.s.	62	586	648
Base metals (including scrap) & their ores	1	17	18
Manufactures of metals, n.e.s.	205	1,557	1,762
Machinery other than electric	1,489	3,456	4,945
Electrical machinery, apparatus, & appliances	678	1,061	1,739
Transport equipment	3	68	71
Professional, scientific, & controlling instruments; photographic & optical goods; watches & clocks	441	3,695	4,136
Miscellaneous a/	317	601	918
Total	25,281	56,566	81,847

a/ Includes some items more properly attributable to one of the special categories above, but the necessary details are not readily calculable.

4/ Table II is based on recorded trade and is therefore subject to some revision in details. It should be considered in connection with Table I as an indication of commodity composition of Communist China's imports.

Table III

POSSIBLE MAXIMUM CARGO TONNAGE FROM NON-BLOC PORTS TO COMMUNIST CHINA IN 1952

By Ocean-Going Vessels (over 1,000 GRT) 5/	Possible Maximum 1952
From Hong Kong	280,000
From W. Europe and Western Hemisphere	195,000
From NE Asia and Australia	150,000
From Japan	15,000
TOTAL	640,000

The CINCPACFLT's estimate that an embargo would reduce Communist China's imports by 1,298,000 tons does not significantly change the conclusion in the Special Estimate 37 that the Soviet Bloc would supply many of the commodities now imported from non-Communist countries.

It is true, as CINCPACFLT points out, that the rest of the Bloc also imports many of the goods included in the above tables of Communist China's imports. Because of Bloc shortages, a few commodities now imported by Communist China, such as raw cotton, cotton cloth, gunny bags, and industrial chemicals would not be replaced by Bloc shipments. But most of the other goods could be immediately replaced with only marginal effect on the total Bloc supply position.

USSR and Satellite production of synthetic rubber was 246,000 metric tons in 1952, probably about 5 to 7 times the amount which the Communist China rubber industry requires annually. Perhaps utilizing stocks of rubber believed to exist in the Bloc, the most essential requirements of the Communist Chinese rubber industry could be met without serious effect on the rest of the Bloc. USSR production of motor vehicle tires is estimated at 10,000,000 units as compared with Communist China's estimated requirements of 400,000 and its production of 200,000 units. The Soviet Bloc is already supplying Communist China increasing amounts of pharmaceuticals and Bloc production thereof is expanding, although Chinese preference still favors American and other Western brands.

Because Chinese Communist requirements for industrial chemicals are so small compared to the Bloc production, most of these requirements could be met with little or no adverse repercussions in the Bloc. The import of 38,000 tons of industrial chemicals shown in Table I compares, for example, to estimated 1952 production in the USSR and Satellites of 4.6 million metric tons of sulfuric acid, 1.3 million metric tons of

5/ See Footnote 1 on page 21.

calcium carbide, 719,000 metric tons of caustic soda, and 529,000 metric tons of chlorine. On the other hand, some industrial chemicals consumed in Communist China would not be replaced for some time because of Bloc shortages. These include such items as paints and pigments, chlorates, bichromates, bleaching powder and cyanamides.

Although the Bloc could eventually replace most of the minerals, metals, machinery, and metal manufactures which Communist China imports, there are certain specific items which could not be supplied in the short-run and others which would involve prohibitive costs. The existing stock of capital goods in Communist China is largely of American, British and Japanese design. In the short-run, it would be extremely difficult to obtain needed replacement components from Bloc sources for existing machinery and other metal manufactures, such as motor vehicle parts, machine tool components, textile and flour-mill equipment and bearings of all types. If Soviet Bloc procurement of such goods on behalf of Communist China could be prevented, Communist China's progress toward industrialization could be delayed. In the long-run, these requirements could be met by replacement of Western equipment with Soviet and Satellite equipment. It is unlikely that Communist China's requirements for these goods would exceed a fraction of one percent of annual industrial production in the USSR and Satellites.

In summary, with Soviet and Satellite producer goods industries already large and modern and growing at rates around 7 to 9 percent annually, it is unlikely that the relatively small requirements of Communist China's industry, if added to other production, would have a significant effect upon industrial growth in the Bloc.

Appendix A

Page 14, Para 58e.

An item which is not entirely relevant to the discussion above is CINCPACFLT's comment on cargo carried annually on Chinese Communist inland waterways, to the effect that the 25 to 35 million ton figure is entirely out of reason. It was, of course, intended to include the entire annual volume of shipping on all the inland waterways of China. The 25 to 35 million ton figure for cargo carried annually on Chinese Communist waterways was submitted by the USAF in its contribution dated 16 January 1952 to SIE-3, "Embargo and Blockade against Communist China." The figure appeared again in SE-27, "Probable Effect of Various Possible Courses of Action with Respect to Communist China," published 5 June 1952. Both the USAF and the ONI indicated in their contributions to SE-37 their concurrence in the use in SE-37 of the relevant paragraphs from SE-27. The figure of 46 million tons is used in this connection in JIC-490/19, "Intelligence for Planning, Volume I, Current Basic Intelligence on the USSR, Satellites and Communist China as of 1 June 1952," 14 August 1952, Top Secret. CIA agrees with CINCPACFLT's interpretation of the Chinese Communist broadcast claim "that 5,312,000 tons of cargo were moved by government-owned water transport (including coastal shipping) in the year 1952."

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